

The Examiner required restriction to one of the following inventions under 35 U.S.C. §

121:

- I. Claims 1-11, drawn to chimeric enzymes;
- II. Claim 12, drawn to an isolated nucleic acid; and
- III. Claims 13-24, drawn to a method of using a chimeric enzyme.

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The Examiner asserted that the inventions defined by Groups I and II are distinct because the each of the products defined by the claims differ in their chemical and biological properties, and they are also capable of separate manufacture, use and sale. Similarly, the Examiner alleged that Groups I and III are related as product and process of use, and that the enzymes of Group I can be made using methods other than that described in Group III.

Applicant respectfully submits that Groups I-III are merely different embodiments of a single inventive concept, i.e. chimeric enzymes and their preparation and use, for which only a single patent should issue. The Groups of claims identified in the Official Action are not distinct inventions, but rather are an intricate web of knowledge and continuity of effort which merit examination of all claims in a single application.

It is respectfully submitted that the claims of Groups I and III are inherently dependent upon the type of enzyme which comprises the chimeric enzyme, in that the function of the enzyme in the chimeric enzyme limits the way in which the chimeric enzyme is used. For example, if the chimeric enzyme comprises  $\beta$ -lactamase as the starting enzyme, the resulting chimeric enzyme has the activity of  $\beta$ -lactamase and any method for determining the presence of an analyte in a test sample using that chimeric enzyme is limited to those methods where  $\beta$ -

lactamase may catalytically to convert a substrate to product. Thus, one is intimately related to the other and should not be separated as distinct inventions.

Furthermore, it is believed that an adequate search with respect to the subject matter of the invention would necessarily encompass the same art. It is only reasonable that a search of the claims of Group I, encompassing chimeric enzymes characterized by a particular enzymatic activity, will also necessarily gather art related to nucleic acids encoding those enzymes and methods of using those enzymes based on their activity, which concepts are encompassed by the claims of Groups II and III respectively. Accordingly, a separate search of each group will result in duplicative efforts.

Even assuming *arguendo* that Groups I-III represent distinct inventions, Applicant submits that a search of the subject matter of each group would not be a serious burden on the Examiner. The Examiner will undoubtedly uncover the art related to all of the claims in even a narrowly focused search of the art related to a single group. The M.P.E.P. §803 (Sixth Edition, Rev. 2, July 1996) states:

If the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to distinct or independent inventions.

In view of the foregoing remarks and in the interest of efficiency, reconsideration and withdrawal of the requirement for restriction are requested.

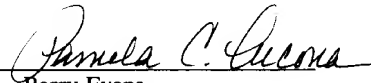
However, in an effort to fully respond to the restriction requirement, Applicant provisionally elects the claims defined by Group III for prosecution in the present application.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and such action is earnestly solicited.

Respectfully requested,

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